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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/827,127	04/05/2001	Chaojun Deng	43774/209425	4908

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EXAMINER

MURPHY, RHONDA L

ART UNIT	PAPER NUMBER
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2616

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/06/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/827,127

Applicant(s)

DENG, CHAOJUN

Examiner

Rhonda Murphy

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 March 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 69-78 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 69-78 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This communication is responsive to the amendment filed on 3/21/07.

Accordingly, claims 1-68 have been canceled and claims 69-78 are currently pending in this application.

Response to Arguments

1. Applicant's arguments filed 3/21/07 have been fully considered but they are not persuasive. Applicant argues Kastenholtz and Gorshe fail to teach or suggest the newly added claim limitations. However, Examiner respectfully disagrees and would like to direct the applicant to the claim rejections listed below. Kastenholtz teaches circuit cards, base cards, transfer cards, switch network cards and interface cards. Separating elements or parts, does not make the claimed invention patentable over prior art. The rejection has been maintained using the prior art references of Kastenholtz and Gorshe.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 71 and 78 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed,

Art Unit: 2616

had possession of the claimed invention. Claim 71 recites, "the first backplane and the second backplane are the same; the first base card and the second base card are the same". Claim 78 recites, "the first backplane and the second backplane are the same". These limitations were not disclosed in the specification and therefore, are considered new matter.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 69 – 70, 72, 73 and 75 – 77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kastenholz et al. (US 2006/0007946 A1).

Regarding claim 69, Kastenholz teaches a system for data communication, the system comprising:

a first circuit card (Figs. 2 and 3; line card module 102) including one or more first interfaces (page 4, paragraph 45; I/O interfaces) and one or more first logic components for processing control (page 4, paragraph 45);

a first transfer card (Fig. 3; local line card 202) coupled to the first circuit card (see Fig. 3; page 5, paragraph 50) through at least a first base card (Fig. 3; page 5, paragraph 50; printed circuit board), the first base card being coupled directly to the first transfer card (see Fig. 3; page 5, paragraph 50);

a second circuit card (Figs 2 and 5; expanded interconnect board 138) including one or more second interfaces (Fig. 5; ports) and one or more second logic components for processing control (page 8, paragraph 74);

a second transfer card (Fig. 5; ASIC 410 a/b) coupled to the second circuit card (see Fig. 5) through at least a second base card (Fig. 5, page 4, paragraph 44; printed circuit board), the second base card being coupled directly to the second transfer card (see Fig. 5);

a first switched network card (Figs. 2, 3 and 5; local interconnect module 118) to at least perform an exchange function between the first circuit card and the second circuit card (Fig. 2; via communication lines between 102, 118 and 138), the first switched network card (118) and the first circuit card (102) being different types of cards (page 5, paragraphs 50-51; 102 is a line card and 118 is a module divided into planes, containing an ASIC);

a first interface card (Fig. 3; interconnect board 218) coupled to the first switched network card (see Fig. 3; page 5, paragraph 51) through at least a third base card (Fig. 3; page 5, paragraph 51; printed circuit board), the third base card being coupled directly to the first interface card (see Fig. 3);

a second interface card (Fig. 3, interconnect board 220) coupled to the first switched network card (see Fig. 3; page 5, paragraph 51);

a first data communication link (Fig. 3, communication lines 217) connecting the first transfer card and the first interface card (page 5, paragraph 50);

Art Unit: 2616

a second data communication link (Fig. 5, communication lines between 220 and 138) connecting the second transfer card and the second interface card (see Fig. 5);

wherein: the first transfer card, and the first circuit card are associated with a first framework (Fig. 2; page 8, paragraph 70; chassis 101); the first interface card, the second interface card, and the first switched network card, are associated with a second framework (Figs. 2 and 3, page 8, paragraph 70; chassis 103), the first framework and the second framework being associated with different physical locations (Fig. 2; page 8, paragraph 70; chassis 101 and 103 in different physical locations).

Kastenholz fails to explicitly teach backplanes. However, it is well known in the art for cards/modules to connect to backplanes.

Therefore, it would have been obvious to one skilled in the art to include backplanes (in each framework, in different physical locations - chassis 101 and 103), in order to provide a means for connecting the cards.

Although Kastenholz teaches base cards, transfer cards and circuit cards, Kastenholz fails to explicitly disclose the cards not being a part of one another.

However, it would have been obvious to one skilled in the art to separate elements, in order to have distinct elements within a system.

Regarding claim 70, Kastenholz teaches each of the first data communication link and the second data communication link including an optical fiber (page 5, paragraph 50: SONET I/O ports; page 8, paragraph 73: Gigabit Ethernet interfaces, inherently include optical fibers).

Regarding claim 72, Kastenholz teaches a system for data communication, the system comprising:

- a first circuit card (Figs. 2 and 3; line card module 102) including one or more first interfaces (page 4, paragraph 45; I/O interfaces) and one or more first logic components for processing control (page 4, paragraph 45);

- a first transfer card (Fig. 3; local line card 202) coupled to the first circuit card (see Fig. 3; page 5, paragraph 50);

- a second circuit card (Figs 2 and 5; expanded interconnect board 138) including one or more second interfaces (Fig. 5; ports) and one or more second logic components for processing control (page 8, paragraph 74);

- a second transfer card (Fig. 5; ASIC 410 a/b) coupled to the second circuit card (see Fig. 5);

- a first switched network card (Figs. 2, 3 and 5; local interconnect module 118) to at least perform an exchange function between the first circuit card and the second circuit card (Fig. 2; via communication lines between 102, 118 and 138), the first switched network card (118) and the first circuit card (102) being different types of cards (page 5, paragraphs 50-51; 102 is a line card and 118 is a module divided into planes, containing an ASIC);

- a first interface card (Fig. 3; interconnect board 218) coupled to the first switched network card (see Fig. 3; page 5, paragraph 51);

- a second interface card (Fig. 3, interconnect board 220) coupled to the first switched network card (see Fig. 3; page 5, paragraph 51);

Art Unit: 2616

a first data communication link (Fig. 3, communication lines 217) connecting the first transfer card and the first interface card (page 5, paragraph 50);

a second data communication link (Fig. 5, communication lines between 220 and 138) connecting the second transfer card and the second interface card (see Fig. 5);

wherein: the first transfer card and the first circuit card are associated with a first framework (Fig. 2; page 8, paragraph 70; chassis 101); the first interface card, the second interface card and the first switched network card are associated with a second framework (Figs. 2 and 3, page 8, paragraph 70; chassis 103), the first framework and the second framework being associated with different physical locations (Fig. 2; page 8, paragraph 70; chassis 101 and 103 in different physical locations); each of the first data communication link and the second data communication link includes an optical fiber (page 5, paragraph 50: SONET I/O ports; page 8, paragraph 73: Gigabit Ethernet interfaces, inherently include optical fibers).

Kastenholz fails to explicitly teach backplanes. However, it is well known in the art for cards/modules to connect to backplanes.

Therefore, it would have been obvious to one skilled in the art to include backplanes (in each framework, in different physical locations - chassis 101 and 103), in order to provide a means for connecting the cards.

Although Kastenholz teaches transfer cards and circuit cards, Kastenholz fails to explicitly disclose the cards not being a part of one another.

However, it would have been obvious to one skilled in the art to separate elements, in order to have distinct elements within a system.

Regarding claim 73, Kastenholz teaches the first switched network card not receiving any data signal that does not transmit through a circuit card (see Fig. 2; all communication to the first switched network (interconnect module 118) goes through the circuit cards (line card module 102 and expanded interconnect board 138).

Regarding claim 75, Kastenholz teaches the first transfer card and the second transfer card are different (Figs. 3 and 5; page 5, paragraph 50: local line card 202; page 8, paragraph 74: ASIC 410).

Regarding claim 76, Kastenholz teaches the first interface card and the second interface card are different (Fig 3; page 5, paragraph 51: interconnect board 218 and 220).

Regarding claim 77, Kastenholz teaches the first data communication link and the second data communication link are different (Fig. 3, communication lines 217 and Fig. 5; communication lines between 220 and 138).

3. Claim 74 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kastenholz et al. (US 2006/0007946) in view of Gorshe et al. (US 6,667,973).

Regarding claim 74, Kastenholz teaches a switched network card coupled to both the first interface card and the second interface card, but fails to disclose a second switched network card coupled to both the first interface card and the second interface card.

Art Unit: 2616

However, Gorshe teaches a second switched network card (Figs. 1b and 4b, HSU located in main shelf 102) coupled to both the first interface card (Fig. 4b, AMU in shelf 404) and the second interface card (AMU in shelf 406).

In view of this, it would have been obvious to one skilled in the art to modify Kastenholz's system by including a second switched network card, in order to provide a back-up switched network card for interconnecting the interface cards.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rhonda Murphy whose telephone number is (571) 272-3185. The examiner can normally be reached on Monday - Friday 9:00 - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

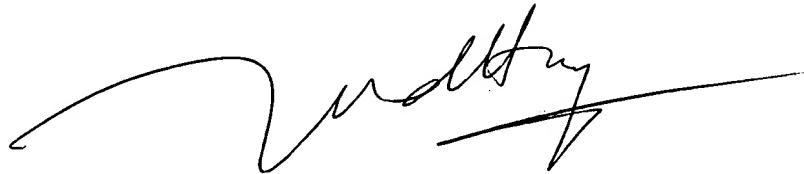
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Art Unit: 2616

USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Rhonda Murphy
Examiner
Art Unit 2616

RM

A handwritten signature in black ink, appearing to read 'Huy D. Vu', with a long horizontal stroke extending to the right.

HUY D. VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600